

ASPIRE TEXTILES SETS HIGHER STANDARDS WITH **LMW'S** PREPARATORY MACHINES FOR AIR JET PROCESS

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Mr. P. Dinesh Kumar, and Mr. P. Sathish Kumar,
Directors, Aspire Textiles

Aspire Textiles LLP, based in Coimbatore, India, is an integrated unit producing air jet yarn and viscose fabric, which was established by P Sathish Kumar and P Dinesh Kumar in 2021 with a vision of becoming an aspirational company providing end-to-end solutions. The Directors who are brothers also managing a spinning unit, Thirumurugan Spinners, started by their father S Palanisamy in 2007 who has rich experience in pesticide, ginning, spinning and power looms. Thirumurugan Spinners has a capacity of 15,000 spindles producing 100% cotton-combed Spinpact yarn.

Sharing information about their new venture, Director P Sathish Kumar says that it was triggered by the increasing demand for synthetic and air jet yarn in the market. Another reason was to achieve self-reliance for their weaving unit having a production capacity of 45,000 metres per day. The fabrics produced are exported to Bangladesh and South Korea. The company is also self-reliant as regards energy with its own solar power plant of 7.5 MW. "During the machine selection for the air jet plant, we evaluated on the basis of parameters like yarn quality, loom speed, air consumption in loom, fabric appearance, fabric quality, etc.," says Sathish Kumar

Choosing LMW Machines


The idea was to spin yarns that would give quicker return on investment. And what drove the management to choose LMW machines? "Being a fabric producer, we have tested different yarns from the market produced by various preparatory machines in our own looms. Detailed study has been conducted in all the parameters and our choice of LMW was based on the better performance of yarn produced from their preparatory machines," he says. The first phase order was executed during September 2021 with production capacity of 4.5 tonnes per day of air jet yarn.

THE PLANT WAS COMMISSIONED WITH CLASSICAL PREPARATORY PROCESS USING THE LATEST SMART SERIES MACHINES:

- Blowroom: Swift Floc LA 21, Unimix LB 7/4 R, Flexiclean LB 5/6
- Card LC 361
- Non Auto Leveller Draw Frame LDB 3
- Auto Leveller Draw Frame LDF3 S.



LMW Gentle Blowroom Line is designed with the flexibility to process different materials. The machine come with different options of opening elements which are required to ensure effective handling of fibres. Automatic bale plucking machine Swift Floc LA 21 provides considerable benefits in terms of manpower saving compared to conventional feeding. Unimix LB 7/4 R, which is a proven machine that ensures homogeneity of the material placed after Swift Floc. Flexiclean LB 5/6 with acute opening elements ensures smooth handling of fibres. The material is fed to card with continuous feeding system to maintain constant feeding



Card LC 361 with the highest active carding area ensures effective fibre individualisation. LMW's carding machine LC 361 has a pressure-regulated chute for uniform feed to card. The lick-in zone has a pair of arcual combing segments which helps in better opening and removal of fused fibres in lick-in zone. The flat zone is uniquely designed with highest active carding area with 36 working flats. Linear can changer gives increased machine efficiency as the can changes take place without altering the delivery speed. An agile online quality monitoring system with a user-friendly interface ensures real-time monitoring of sliver quality.

The breaker draw frame LDB 3 has the advantage of independent drive arrangement which enables the machine to perform at highest efficiency. The machine has lifetime lubricated top roller end bush which reduces machine downtime. The programmable oscillating TR strip coupled with inverter-controlled fan motor ensures a clean working environment. The higher delivery speed is achieved with a unique drafting system with shorter travelling length of sliver to coiler. LDB 3 also comes with separate drive for coiler, enabling the operator to adjust the coiling speed through display based on the process and material.

The quality of the draw frame sliver determines the final yarn quality and this has a direct impact on the profitability of the spinning mill. LDF3 S is designed to measure critical parameters of input sliver precisely and deliver high-quality sliver with duo digital auto-levelling arrangement. Auto suggestion of levelling action point with servo draft helps achieve the lowest sliver CV. Best-in-class drafting system with symmetric adjustable sliver guides and specially designed delivery trumpet helps achieves higher speeds. Patented top roller design with inbuilt end bush is for reduction in buffing time, resulting in increased machine uptime.

LDF3 S also has inbuilt SP smart auto piecing with userfriendly operation for increased machine efficiency. An online quality monitoring system (QMS) improves ergonomics and enables constant monitoring of sliver quality, thereby providing real-time inputs to operator and thus ensuring highest quality. The coiler is coated with special finish for higher life and better coiling.

Mr. Sathish Kumar further informed that the machines are performing well and meeting the desired quality output right from installation. The consistency in productivity and quality is maintained at every stage and the yarn produced with LMW preparatory machines are performing as per expectation in the downstream process.

